



## **NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE**

**Miami, Florida 33165**

---

# **Cooler and Mostly Drier than Normal January Across South Florida**

The main weather event in January was the extended period of cold temperatures between January 2<sup>nd</sup> and January 13<sup>th</sup>. During this time, a total of 17 individual daily record low temperatures and record low maximum temperatures were set at the four primary climate sites (Miami, Fort Lauderdale, West Palm Beach and Naples). The cold episode reached its peak impact during the weekend of January 9<sup>th</sup> and 10<sup>th</sup> and extending into Monday, January 11<sup>th</sup> in the wake of a second arctic cold front moving through the region. Saturday, January 9<sup>th</sup> was noted by falling temperatures in the 40s, clouds and rain, with even unverified reports of sleet and snow. Sunday, January 10<sup>th</sup> was the coldest day of the outbreak, with low temperatures below freezing over most of south Florida, including parts of the east coast beaches, followed by high temperatures failing to reach 50 degrees over most of the area. The coldest morning occurred on Monday, January 11<sup>th</sup> when temperatures once again dipped to below freezing over most of south Florida.

In all, freezing temperatures were registered on 5 to 7 days over the Lake Okeechobee region and interior portions of southwest Florida.

Records for consecutive number of cold days were set in several locations. Following is a summary of these records for the four primary climate sites in south Florida:

### **West Palm Beach:**

- Average 12-day temperature of 49.9 degrees between Jan 2 and Jan 13 is lowest on record for any 12-day period (previous record 50.9 degrees set from January 16-27, 1977).
- Set new record of 12 straight days of lows at or below 45 degrees (previous record 9 set in Jan 1956).
- Tied record of 12 straight days of lows below 50 degrees (previously set in Jan 1956 and Dec 2000-Jan 2001).

- Set new January record of 5 total days of high temperatures below 60 degrees (old record 4 days in 1940, 1958 and 1970).

#### **Naples:**

- Average 12-day temperature of 48.8 degrees between Jan 2 and Jan 13 is lowest on record for any 12-day period (previous record 51.3 degrees set from January 9-20, 1981).

- Set new record of 13 straight days of lows below 50 degrees (previous record 12 days in Dec 1980/Jan 1981 and Feb 2006).

- Set new record of 12 straight days of lows at or below 45 degrees (previous record 8 set in Jan 1977).

- Set new January record of 6 total days of high temperatures below 60 degrees (old record 4 days in 1956, 1958 and 1970).

#### **Moore Haven:**

- Average 12-day temperature of 46.4 degrees between Jan 2 and Jan 13 is lowest on record for any 12-day period (previous record 46.5 degrees set from January 21-February 1, 1940).

#### **Fort Lauderdale:**

- Tied record of 12 straight days of lows below 50 degrees (previously set in Jan 1956).

- Tied January record of 10 total days of high temperatures at or below 65 degrees (previously set in 1940).

- Average 12-day temperature of 52.1 degrees between Jan 2 and Jan 13 is the third lowest on record for any 12-day period and the **coldest such period since 1940** (record 51.1 degrees ending February 1, 1940).

#### **Miami:**

- Set new January record of 10 total days of high temperatures at or below 65 degrees (previous record 8 days in 1940 and 1977). This also ties the record for any single month (previously set in February 1958).

- Average 12-day temperature of 52.7 degrees between Jan 2 and Jan 13 is the 10<sup>th</sup> lowest on record for any 12-day period and the **coldest such period since 1940** (record 49.3 degrees ending January 31, 1940).

A return to seasonal to above seasonal temperatures took place for most of the remainder of the month, with temperatures deficits relative to normal shrinking from 15 degrees to between 4 and 6 inches below normal by the end of the month. Nevertheless, January 2010 ranks as the coldest January since 2003 for virtually all of south Florida. Miami Beach recorded its third-coldest January on record,

with West Palm Beach recording its 7<sup>th</sup> coldest, Naples its 5<sup>th</sup> coldest and Moore Haven its 8<sup>th</sup> coldest January on record.

Here are average January 2010 temperatures and departures from normal for select locations:

<b>Location</b>	<b>January 2010 Avg Temp</b>	<b>Departure From Normal</b>	<b>Rank</b>
Miami Int'l	64.1	-4.0	17 <sup>th</sup> coldest
Fort Lauderdale Int'l	63.3	-4.2	13 <sup>th</sup> coldest
Palm Beach Int'l	60.6	-5.6	7 <sup>th</sup> coldest
Naples Regional	59.8	-4.5	5 <sup>th</sup> coldest
Miami Beach	61.8	-6.1	3 <sup>rd</sup> coldest
Moore Haven	57.3	-5.4	8 <sup>th</sup> coldest

## Precipitation

January precipitation ranged from 0.5 to 1.5 inches below normal over most of the eastern half of south Florida, and within a half inch of normal over the western half of south Florida including the Lake Okeechobee area. The dry air associated with the cold outbreak during the first half of the month limited the rainfall during this period, but a return to warmer temperatures along with low pressure systems in the middle to upper levels of the atmosphere led to an increase in rainfall during the second half of the month.

Following are January rainfall totals and departures from normal in inches for selected locations, along with the total and departure from normal precipitation for the dry season of 2009-2010 so far:

<b>Location</b>	<b>January 2010 Rainfall</b>	<b>January Departure From Normal</b>
Miami Int'l	0.89	-0.99
Fort Lauderdale Int'l	1.37	-1.57
Palm Beach Int'l	2.03	-1.72
Naples Regional	1.65	-0.36
Miami Beach	0.88	-1.56
Moore Haven	1.88	-0.16
Devils Garden	2.45	+0.08
The Redland	2.44	-0.13
Immokalee	2.10	-0.23
Clewiston	1.62	-0.76
Palm Beach Gardens	3.28	
Oasis Ranger Station	2.44	
LaBelle	1.99	-0.32
Marco Island	1.62	

Homestead	0.95	
Brighton	0.62	
Hollywood	1.99	-0.30

<b>Location</b>	<b>Nov 2009 thru Jan 2010 Rainfall</b>	<b>Nov-Jan Departure From Normal</b>
Miami Int'l	6.87	-0.62
Fort Lauderdale Int'l	13.56	+3.40
Palm Beach Int'l	13.06	+0.62
Naples Regional	6.71	+1.18
Miami Beach	10.36	+2.62
Moore Haven	5.47	-0.12

## Outlook for February-April

The [Climate Prediction Center's outlook](#) for February through April calls for an increased likelihood of cooler and wetter than normal conditions. This is consistent with the typical El Niño pattern of more Gulf of Mexico storm systems which provide additional dry season rainfall along with cloud cover and cooler daytime temperatures. These Gulf storms also have the potential to produce severe weather, including tornadoes, as was the case during El Niño episodes in 1998 and 2003.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at [weather.gov/southflorida](http://weather.gov/southflorida).